

REMARKS

This Amendment is intended as a full and complete response to the final Office Action dated October 27, 2006. In the Office Action, the Examiner states that claims 1-18 are pending and stand rejected. By this Amendment, Claim 17 is amended and Claims 2-18 continue unamended.

In the Claims:

Independent Claim 17 has been amended for informal reasons to provide grammatical changes that further clarify the features considered inventive. It is submitted that such changes to the claim do not add any new subject matter.

In view of both the amendments presented above and the following discussion, it is respectfully submitted that the claims now pending in the application are not anticipated or obvious under the provisions of 35 U.S.C. § 102 and § 103. Thus, it is earnestly believed that all of the claims are allowable.

Rejections

A. 35 U.S.C. § 102

Claim 17 stands rejected under 35 U.S.C. §102 as being anticipated by US Patent No. 6,247,626 to MacVicar. The rejection is respectfully traversed.

Independent claim 17 recites:

An explosion-driven setting tool, comprising a setting mechanism (12) driven by a propellant (23); ignition means (18) for igniting the propellant (23); a receptacle (15) for receiving a propellant holder (20), said propellant holder having a housing (21) with an interior space (22) for receiving propellant (23) and a data storage identification unit (40) in which a propellant supply level (27) is stored for being read-out; a display (50) for displaying the propellant supply level (27); a data communication interface (31) for receiving identification data read-out from the data storage identification unit (40); and a data processing unit (30) for receiving the identification data from the data communication interface (31) and connected with the display (50) for communicating the propellant supply level (27) thereto. (emphasis added).

As a preliminary matter, we believe that it would be helpful to review the appropriate standard under 35 U.S.C. § 102 for analyzing the features of a claim with respect to the prior art. It is well settled that “[a]nticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim” (Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added)). The MacVicar patent fails to disclose each and every element of the claimed invention, as arranged in the claim.

The MacVicar patent discloses that the fuel canister 34 includes a standard tire-type valve 36 that opens as the canister 34 is screwed into its receptacle in the tool handle to admit fuel to the tool 10 (see MacVicar, col. 6, lines 4-7). The MacVicar patent does not disclose or even suggest “said propellant holder having a housing (21) with an interior space (22) for receiving propellant (23) and a data storage identification unit (40) in which a propellant supply level (27) is stored for being read-out.”

In the Office Action, it is stated that the claimed feature of the “data storage identification unit in which propellant supply level is stored” is disclosed in Fig. 23, by the “microprocessor 300” which receives input signals from the “fuel pressure sensor”. It is submitted that this association of components is incorrect, since the microprocessor 300 and the fuel pressure sensor are components of the setting tool, as opposed to components of the claimed propellant holder.

Further, the “data communication interface (31)” of the present invention is used to communicate with the data storage identification unit (40) of the propellant holder (20). By contrast, MacVicar discloses that the EEPROM of the tool can be used for data exchange between the tool and a PC or other user interface. Nowhere in MacVicar is there any disclosure regarding data writing or reading to/from the propellant holder (canister 34). Therefore, since the MacVicar patent fails to disclose that “said propellant holder having a housing (21) with an interior space (22) for receiving propellant (23) and a data storage identification unit (40) in which a propellant supply level (27) is stored for

being read-out,” the MacVicar patent fails to disclose each and every element of the claimed invention, as arranged in the claim.

As such, it is submitted that independent claim 17, is not anticipated and fully satisfies 35 U.S.C. §102 and is patentable thereunder. Therefore, it is respectfully requested that the claim rejection be withdrawn.

B. 35 U.S.C. § 103

1. Claims 1-16 and 18

Claims 1-16 and 18 stand rejected under 35 U.S.C. §103 as being obvious over US Patent No. 6,247,626 to MacVicar in view of US Publication No. 2004/0215407 to Thielman et al. (hereinafter “Thielman”) or US Patent No. 5,889,211 to Mandie et al. (hereinafter “Mandie”). The rejection is respectfully traversed.

Independent Claim 1 (and similarly, independent Claim 10) recites:

“A propellant holder for being releasably mounted in a setting tool having a data communication interface (31), said propellant holder comprising a housing (21) having an interior space (22) for receiving propellant (23); and a data storage identification unit (40) affixed to said housing (21) and in which a propellant supply level (27) is stored for being read-out by the data communication interface (31) of the setting tool.” (Emphasis added).

As a preliminary matter, we believe that it would be helpful to review the appropriate standard under 35 U.S.C. § 103 for analyzing the features of a claim with respect to the prior art. It is well settled that [t]he test under 35 U.S.C. § 103 is not whether an improvement or a use set forth in a patent would have been obvious or non-obvious; rather the test is whether the claimed invention, considered as a whole, would have been obvious. Jones v. Hardy, 110 USPQ 1021, 1024 (Fed. Cir. 1984) (emphasis added). The combination of the cited art fails to teach or suggest the Applicant’s invention as a whole.

a) MacVicar in view of Thielman

As discussed above, MacVicar fails to disclose “a data storage identification unit (40) affixed to said housing (21) and in which a propellant supply level (27) is stored for being read-out by the data communication interface (31) of the setting tool.” Thielman discloses a fuel container with an internal pressure sensing unit (250) consisting of a pressure sensor (210), a memory unit (240), wire bonds (245) and a flexible circuit (260).

The memory unit (240) of Thielman is not affixed to the housing of the container, as recited in Claim 1 of the present invention. Rather, the memory unit (240) is arranged inside of the container on a part of the valve where high temperature changes can occur when a liquid gas is dispensed by the valve and vaporizes immediately after (see FIGS. 1 and 2a of Thielman).

The combination of MacVicar and Thielman fails to disclose or suggest fixing the memory unit to the housing. Moreover, the combined patents fail to disclose or suggest using the memory without the pressure sensor. Accordingly, a person skilled in the art for which the invention pertains would not have found it obvious to exclude the pressure sensor completely and to arrange (affix) only the memory unit on the housing, as described and claimed in the present invention. Accordingly, the combination of MacVicar and Thielman would not motivate a person skilled in the art towards the Applicants’ claimed invention, and fails to teach or suggest the invention as a whole.

b) MacVicar in view of Mandie

The Mandie patent discloses a microsensor structure for sensing an environmental condition in a harsh media including strong chemicals, such as polar and non-polar solvents, acid solutions or alkaline solutions, as well as extreme temperatures and pressures (see Mandie, col. 1, lines 6-19). The microsensor structure can be a pressure sensor (see col. 4, lines 24-26).

The combination of MacVicar and Mandie fails to teach or suggest “a data storage identification unit (40) affixed to said housing (21) and in which a propellant supply level (27) is stored for being read-out by the data communication interface (31) of the setting tool.” In contrast to FIG. 5 and the text in col. 6, lines 54-60 of Mandie, FIG. 5 is a functional block diagram that does not provide any spatial relationship of the components. Nothing therein discloses that the microsensor structure is affixed to the device (82).

Further, the microsensor structure of Mandie is used for monitoring purposes, as opposed to storing the propellant supply level for being read-out by the data communications interface 31 of the setting tool. For example, when device 82 comprises a fuel storage tank in a vehicle and the liquid level reaches a certain amount, monitoring device 87 sends a signal to a dashboard light to warn the driver of diminishing fuel supply. (see Mandie, col. 7, lines 16-20).

The combination of MacVicar and Mandie merely discloses a microsensor coupled to a fuel storage container for monitoring fuel levels. Nowhere is there any teaching or suggestion of “a data storage identification unit (40) affixed to said housing (21) and in which a propellant supply level (27) is stored for being read-out by the data communication interface (31) of the setting tool.” Therefore, the combination of MacVicar and Mandie fails to address and solve the problems addressed by the present invention, and accordingly, fails to teach or suggest the invention as a whole.

As such, it is submitted that independent claim 1, and similarly, independent claim 10 are not obvious and fully satisfy 35 U.S.C. §103 and are patentable thereunder. Furthermore, claims 2-9, 11-16 and 18 depend, either directly or indirectly, from independent claims 1 and 10 and recite additional features of the invention. As such, it is submitted that these dependent claims are also not obvious and fully satisfy 35 U.S.C. §103 and are patentable thereunder. Therefore, it is respectfully requested that the claim rejections be withdrawn.

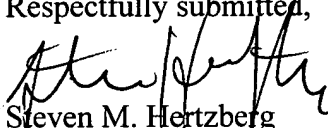
CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance, and allowance of the application is respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place the case in condition for final allowance, it is respectfully requested that such amendment or correction be carried out by Examiner's Amendment and the case passed to issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned at (212) 885-9223 so that the appropriate arrangements can be made for resolving such issues as expeditiously as possible.

The Commissioner is hereby authorized to charge any fees, or to credit any overpayment, due by reason of this Amendment to Deposit Account No. 01-0035.

Respectfully submitted,


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